

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Previously Presented): A plasma processing device comprising:
an inject plate including a first hole with a first diameter;
an upper electrode including a second hole with a recessed area having a second diameter larger than the first diameter; and
a hybrid ball-lock device configured to removably secure the inject plate to the upper electrode by expanding into the recessed area.

Claim 2 (Original): The plasma processing device of claim 1, wherein the hybrid ball-lock device comprises an actuating hybrid ball-lock device.

Claim 3 (Original): The plasma processing device of claim 1, wherein the hybrid ball lock device comprises an actuating hybrid spring-plunger device.

Claim 4 (Original): The plasma processing device of claim 1 wherein the hybrid ball-lock device comprises a ceramic head.

Claim 5 (Original): The plasma processing device of claim 1 wherein the hybrid ball-lock device comprises a silicon head.

Claim 6 (Original): The plasma processing device of claim 1 wherein the hybrid ball-lock device comprises a quartz head.

Claim 7 (Original): The plasma processing device of claim 1 wherein the hybrid ball-lock device comprises an anodized aluminum head.

Claim 8 (Original): The plasma processing device of claim 1 wherein the hybrid ball-lock device comprises a metallic head.

Claim 9 (Original): The plasma processing device of claim 6 wherein the head is coated with a ceramic material.

Claim 10 (Original): The plasma processing device of claim 1, wherein the hybrid ball-lock device comprises a CRES fastener housing.

Claim 11 (Original): The plasma processing device of claim 1 wherein the hybrid ball-lock device or threaded shaft is removably connected to a release button.

Claim 12 (Original): The plasma processing device of claim 1, wherein the hybrid ball-lock device comprises at least one retaining ball.

Claims 13-18 (Canceled).

Claim 19 (Previously Presented): The plasma processing device claim 1, further comprising a process chamber in which the inject plate is removably secured by the hybrid ball-lock device, and the inject plate is configured to accept insertion to the ball-lock device from inside the process chamber.

Claim 20 (Previously Presented): The plasma processing device of claim 19, wherein the second hole is a blind hole.

Claim 21 (Previously Presented): The plasma processing device of claim 19, wherein the hybrid ball-lock device comprises a spring with an axis oriented perpendicular to an axis of the second hole and configured to push a ball into the recessed area.

Claim 22 (New): The plasma processing device of claim 1, wherein a boundary of the recessed area is formed by a lower electrode formed separately from the inject plate.

Claim 23 (New): The plasma processing device of claim 22, wherein the lower electrode is disposed directly between the upper electrode and the inject plate.

Claim 24 (New): The plasma processing device of claim 23, wherein the lower electrode includes a third hole axially aligned with axes of the first and second holes.

Claim 25 (New): The plasma processing device of claim 24, wherein the third hole has a third diameter smaller than the second diameter.

Claim 26 (New): The plasma processing device of claim 22, wherein the boundary is a portion of a seam formed between the upper electrode and the lower electrode.

Claim 27 (New): The plasma processing device of claim 26, wherein the seam is sealed by a compressible seal so as to prevent gas leakage between a process chamber of the plasma processing device and an area outside the process chamber.

Claim 28 (New): The plasma processing device of claim 22, wherein a button of the hybrid ball-lock device comprises a getter material.